



Laughing at Life's lessons: the role of Humour in Medical Teaching – an interactive assessment among medical faculty in Southeast Asia

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ABSTRACT

Humour has been used in class room teaching. Concerns have been raised about the use of humour especially at the bedside in the context of disease and death. Despite a proven beneficial role in improving attendance and content assimilation, very few studies have reported humour as a tool in medical teaching. We addressed the issue in an online moderated discussion (ML Web platform) amongst medical faculty (n=32) in the South East Asian Region as part of an e-learning exercise (part of FAIMER Fellowship programme). The discussion, lasting a month (Jan 2012) revolved around perspectives, comfort zones in the use of humour in medical teaching/learning process and documenting the use of edutainment in medical training. Faculty and fellows (each having at least 5-10 years of teaching experience with medical students) involved in discussion were from varied disciplines. The responses were collected over 4 weeks of participation. Participants were requested to refrain from direct and personal insults as a means of using humour. 199 e-mails (listserv) during the month long discussion (100 jokes besides others). Medical faculty (n=32) is primarily enthusiastic and willing to use humour in classroom/small group of students (Perspective); they are uncomfortable with patient situations (comfort zone). Bedside (situation) teaching is tense and gloomy. Risk of negative humour is disproportionately high. Medical learning situations need a "different" sense of humour (in Teaching/ Learning situation). Visual (e-based) and verbal (modules on humanities) may be the way ahead.

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Introduction

Humour has been used in therapy and has been known to ease anxiety, stress, and depression; reduce pain; and increase body immunity. (1) However, in many disciplines of human healthcare/medicine, concerns have been raised about the use of humor especially at the bedside in the context of disease and death. Typically,

humour has three components 1) a commonly understood situation/construct, 2) a build-up of anticipation, suspense or tension and an 3) unexpected twist, response or punch line. There is a perceived risk of it becoming aggressive or self defeating. Ordinary, everyday situations set the stage for the buildup of anticipation and the revelation of the unexpected twist. If the recipient does not understand or fails to

familiarize with the premise (or is sleeping), they fail to find the punch line (“kill” the joke).

Humour has been used in teaching. A strong positive correlation exists between class attendance and student performance. (2, 3) Today's students are no longer content to simply sit in class soaking up the wisdom delivered to them. They want to grapple with the material, hold it up to the light, and explore it in a collaborative setting. They desire to go beyond merely parroting back piles of information—they want to work to find relevance with the material. Consequently, educators often try innovative methods of encouraging group learning. Motivation and curiosity are cornerstones for learning, and one can leverage that energy by using the extra credit of humour as a place to flip a lesson. (4) While no substitute for substance, humour as a teaching tool can create a more positive, fun, interesting environment that promotes learning. Evidence of its benefit, as a teaching tool, has been founded in other disciplines (e.g. Economics, Statistics). (5,6) At the same time, a skillful use of humour minimizes risk to the self esteem and professional reputation of the teacher / facilitator. While there are noted physiological and psychological benefits associated with humour, the main reason for using it in the classroom is to improve student learning. The creative development and expression of humour deals with “how to” teach, not what to teach. Perhaps there is no concrete empirical data to define its role in medical education. (7- 9) The literature on the use of humour in teaching health care and disease is scanty, as well. (10)

There are very few studies which have examined use of humour as a tool in medical teaching. In a randomized controlled trial of using humour (any event that elicits laughter) to teach topics in orthopedics, in a series of four lectures, to a batch of 90 medical students, Narula et al (9) did find a substantial improvement in understanding of the concept of the subject covered in the lecture (68.17%) .The students were divided into two groups (A and B) by lottery method. As reported by the students, in the experimental group (B) wherein humour was used during

lecture, they felt more comfortable in class (74.99%), became more attentive (74.99%) and perceived that the teacher was friendlier to them (74.99%). In the fourth lecture, it was also observed that behaviour that implied negative attitudes such as turning up late for class and yawning were frequent in group A (without humour), whereas behaviour which indicated positive attitudes such as writing notes and eye contact were noted more frequently in group B. The students in the latter group also progressively scored better in the post-class evaluation tests.

The Foundation for Advancement of International Medical Education and Research (FAIMER) was incorporated in September 2000. The Foundation concentrates its efforts in three thematic areas: creating educational opportunities for health professions educators, discovering patterns and disseminating knowledge, and developing data resources.

It conducts two-year fellowship for medical educators at various institutes in America, Africa and Asia. PSG FAIMER is one of the three institutes in India conducting this fellowship program. It has two components: 1) on-site and online sessions and 2) development and implementation of Curriculum Innovation Project (CIP). After an on- location medical education programme, there are monthly online sessions included in each year's curriculum called the ‘Mentoring and learning Web’ (Ml Web) discussion. The topic and process of online discussion is deliberated and agreed upon by the moderators and participants during the on- location session. Each month's topic is discussed and moderated by 4-5 fellows- 2-3 of first year and 2-3 of second year. The intersession program, is held 7 months every year (June to February) using listserv on the Mentoring-Learning (ML-Web) platform (an online group of educators based on listserv for discussions). The major goal of these sessions is to bring a global population of educational leaders (FAIMER Fellows and faculty) together and to learn from one another. Leadership qualities in giving preamble, leading, directing and

summarizing are also expanded by the moderators and participants.

Objective: There is a dearth of data (quantitative and/ or qualitative) on the applicability of Humour in Medical Education. We tried to address the issue in an online moderated discussion amongst medical faculty in the South East Asian Region as part of an e-learning exercise. The aim was to generate discussion amongst middle and senior level faculty on the topic of “Humour in Medical Education” and identify core areas which impeded the process of using Humour as follows:

- What, why and how to use humour in class rooms
- The specific aspects of using humour in medical education

This would enable us to tabulate the strengths and weaknesses in terms of perspective / comfort zones/ technology and its applicability in a nebulous domain (humour) with inputs from experienced fellows and faculty in medical education. This is an attempt at exploring the prospects of using humour, formally, in medical education.

Method

We discussed “role of Humour in Medical education” as a topic, as the need to introduce “humour” / art into the science of medical teaching / learning (curriculum).

Process: The PSG-FAIMER Regional Institute online session (for year 2012) started with moderators deliberating online in June 2011. Different topics had been selected by consensus during the onsite session (April 2nd – 8th, 2011) and agreed upon for each month’s discussion. In January 2012 a month long discussion, preceded by a survey (using survey monkey) to assess attitude, experience and comfort zones with regard to use of Humour in Medical education was undertaken. The survey had 10 questions (listed below). The team of moderator/coordinator (2010 Fellows) and discussants (2011 Fellows) on a week to week

basis (4 weeks in January 2012, on different aspects of the topic) was formally agreed upon during the onsite session for fellows (April 2nd – 8th, 2011) at PSGFRI, Coimbatore.

The intersession program was held from June 2011 to January 2012. A brainstorming interaction amongst the team of faculty and fellows on the set induction, general weekly objectives, and moderation of discussion was formalized in the last week of December, before beginning the survey and actual discussion on the ML web platform (online) in the month of January, 2012

The dynamics of the discussion revolved around (based on the survey questions initially piloted amongst the core group of faculty/fellows (Dec 25th -31st) and modified and then posted online for the entire group using Survey monkey online. It was open for a week (Jan1-7th)

1. Eliciting the perspectives on use of humour in medical training.

(E.g. Do you use humour in introducing your classes ; Do you appreciate if spontaneous humour is generated by students/learners in your classroom ; Should teacher deliberately introduce humour in the classroom)

2. Investigating the comfort zones in the use of humour in medical teaching/learning process.

(E.g. Do you think that the topic of Humour in Medical practice is worth taking a class on, for medical students; Do you think students/ learners would disrespect you for attempted humour in classroom; How should we participate in spontaneous humour generated during interactive sessions with learners-- silent appreciation / pleasant smile / hearty laugh / guffaw; Is the decorum of an adult/student classroom disrupted with spontaneous humour in the classroom)

3. Ascertaining the various possible methods of discussing/documenting the use of edutainment in medical training.

(E.g. Is the subject/ Learning Objective understood better by learners / teachers with a

sense of humour in the classroom / small group / large group than without it; Do you consider humour an appropriate modus to introduce difficult negative concepts like "death", "end of life care", "event free survival in cancer therapy" to students; How can you evaluate the role of humour in medical education)

Being an unusual topic, examples were sought from and given for each domain/aspect of discussion. Faculty and fellows (each having at least 5-10 years of teaching experience with medical students in their respective disciplines) involved in January's discussion were from varied disciplines: Anatomy, Physiology, Community Medicine, Microbiology, Physiotherapy, Gynecology, Surgery, Pharmacology, and Pediatrics. The responses of the participants to the survey was tabulated and analyzed as percentage. The responses were categorized into domains of perspective, comfort zones, applicability in Teaching/Learning situation. The listserv discussions were analyzed as number of emails, participants involved and content of web discussion (pdf, doc files exchanged). It was categorized into 4 weeks of participation with summary reports being posted online by two designated fellows of the core team at the end of each week. Participants were requested to refrain from direct and personal insults as a means of using humour.

Results

The survey results (Table1) indicated the perceptions and need of the participating medical faculty and helped us (core team) generate the Specific Learning Objectives for the discussion on Humour in Medical Education (HinME). All 32 FAIMER fellows participated in the preliminary survey on HinME. The aspects covered included "The definition and scope of humor in medical education; Review of the existing literature on use of humour in clinical teaching; Applicability of humor in future and devise methodology for documentation and research on the use of HinME." The respondents took part actively online.(table 2) A synopsis is presented below.

Outcome of month's discussion on Humour in Medical Education (textual summary)

A few important aspects on the role of HinME emerged from the month long e-discussion amongst medical faculty from various disciplines and different colleges across South Asia. We focused on the following major related subtopics, in order of increasing relevance, with the references cited by the discussants in parentheses:-

What? The evolutionary explanation of humour (11) explains that humour occurs when the brain recognizes a pattern that surprises it, and is rewarded with the experience of humour, an element of which is broadcast as laughter. It is the (kindly) contemplation of the incongruities of life and the artistic expression thereof. An in-depth discussion on the mechanism of humour is beyond the scope of this article. However, briefly, the familiar or expected part is the premise or the lead-in for the subsequent elements. Very often, commonly understood situations are exaggerated or the absurdity in them is brought out. Commonly understood situations for students at this particular juncture in their lives would include dating, roommates, culture shock, new found freedom from parents, boring professors, university bureaucracy, money worries, campus life. As a result, students will often find unexpected, unusual or exaggerated observations on these by anyone (including a professor) to be humorous. The second element is the build-up of anticipation. It is unfolding the story, revealing information, in such a way so as to keep the audience hanging and wanting to know more. This is a characteristic element of a humorous story telling compared to a one-liner. Humorous items have a common third element which is a sudden and unexpected twist or comment at the end, a quick reversal from sense to nonsense. There is an incongruity between the expected (elements 1 and 2) and the unexpected (element3). The sharper the contrast and the more sudden it strikes, the more successful it is, usually. It has been suggested that it helps to have a twisted mind, in a given situation, to see the unusual, the ironical, if not the ridiculous, the absurd and the

illogical. (5, 13, 14). All the participating fellows and faculty agreed to and elaborated on this understanding of the definition of humour. (see Perspective in Table 1, Week 2 in Table 2)

Why? Dullness in the classroom can kill students' intellectual interest and destroy all student desire to pursue additional study in the subject matter. Teaching effectively requires imagination and creativity to turn students on by turning negative perceptions off. In this context, Faculty recognizes its humor's role as a monotony breaker and attention grabber in the conventional classroom or small group learning situation. (Comfort zone in Table 1, week 1 in table 2) Humour breaks down barriers to communication between the faculty/professor and the students. These barriers e.g. position, title, age, income, knowledge can obstruct learning (5, 15, 16)

When teachers have a sense of humour and are not afraid of using it, students relax and listen better. Having a sense of humour (most faculty agree - 97% only one disagreed; see Table 1) is an indication that the teacher is human and can share with the group. A teacher who makes mistakes and is willing to admit it or laugh at him/herself communicates to students that it is also okay for them to be creative, take chances, look at things in an offbeat way, and perhaps, even make mistakes in the process. Humour and creativity are related and there is a connection between "Ha Ha and Aha". (17)

Students may retain the subject matter more, if the humour reinforces the class content. The main reason is that it gains attention interest. Students are less intimidated and less inhibited about asking questions or making comments. Students are more likely to attend classes where humour is used and to skip classes that are boring. There is a strong correlation between class attendance and student performance. (18-21) Increased learner comprehension and cognitive retention (due to less stress and anxiety), reduced negativism or hostility regarding potential stressors (grades) in the classroom, as well as improved student attitudes

toward the subject and the instructor have been reported. (5, 13, 22)

Why not? There are valid apprehensions on the use of humour to deride (self/student or patient) in medical or real life situation. Much of teaching/learning occurs in health care in such situations. Faculty is often reluctant to use humor as a teaching tool based more on personal preferences than any scientific reason. Primarily, the reasons include A) they are not trained in the use of humour as it is not part of any curriculum. B) They often believe that they need to have the skills of a professional comedian in order to use humour. C) They frequently contend that teaching is a serious business and view use of humour as frivolous, undignified and demeaning to the profession (12)

How to? Type of humour in medical teaching: Telling jokes is one of the most explicit ways to interject humor into a classroom. A medical faculty is seldom trained to be a comedian and may not regard oneself as a very good teller of jokes. Hence, jokes are a fairly high-risk form of humour where the risk relates to the chances of "bombing" or not coming off as funny, in front of students and having to deal with the accompanying embarrassment and humiliation. (5,13) One may remind oneself, that the end result of bombing, total silence, may be the same as if no attempt had been made to use humour at all. Medical faculty must still attempt humour in classroom because of the following reasons:-

Students do not expect faculty to be a joker or clown. They expect faculty to be teachers and educators first. (23, 24) Maybe an attempt at a joke/humour is better than none at all. Especially in the medical teaching environment, it is the reluctance of the faculty to break the ice which leads to a monotonous depiction of death/disease and disability.

Recovering from a joke that bombed with a quick quip may (e.g. my wife told me it wasn't a good joke), in itself, reduce tension in the classroom and add some humour. Pretending nothing happened and continuing to talk is another strategy. Unacceptable recovery attempts

include trying to explain the joke as well as penalizing the students.

Non-joke examples of humour applicable in the medical classroom (5, 13): These have lesser chances of bombing and have more impact especially when used in relation to the class/subject at hand

Quotes: of students, yourself or other famous people often provide one of the simplest ways of introducing humour into a lecture (often, a visual helps).

Cartoons are easy to find, easy to use.

Multiple choice questions wherein the questions may be the build up and the choice(s) may be the punch line

Top 5 (or 10) listing; Current event clips; Definitions / auditory clues / nonverbal humour

Self effacement is probably the most non offensive, safe and convenient form of humour. Poking fun at oneself.

Role of humour in the medical / clinical classroom (Table 1 and 2)

Faculty is interested and enthusiastic about using humour (as a tool) in making the classroom / small group discussions interesting. They are averse to using negative humour. (25) Since disease/disability and death is common in a medical/clinical environment, applicability of HinME is hindered. They are also averse to using any humour at the bedside for fear of a perceived negative implication of the same. Application of situational humour (patients') is difficult in a classroom environment, as well. An emphasis on coping /convalescence and recovery is a veritable field for application of HinME. Within the web discussion (listserv), the trend revealed that case based examples evoked abundant responses from participants (100+jokes in a span of 14days). This seems to follow the pattern in interactive workshops where involvement is evoked by relevant real life scenarios.

Humour that should be avoided because of its potentially offensive nature (27) include put-downs of any specific individual (other than oneself, perhaps), put-downs of any specific group (nationality, race, religion, sex), sexual content or innuendo, profanity /vulgarity. Testing material in advance on friends, colleagues and family members can help detect potentially offensive material before it is used. Students often do not feel offended by the use of humor (5, 23). However, faculty still should be sensitive on this issue. While there is always a place for in-class, spontaneous, on the spot witticisms, humour as a presentation tool must be well-planned and well-thought out and content related. Being a student of humour, learning from others, selecting types of humour that one is comfortable with and starting a humour file helps. Watching students who seem to be enjoying listening to you and hearing them laugh at your humour is very rewarding. A sense of humour counts as a virtue and a desirable leadership quality. It improves the sense of value in a student's perspective. "If teachers can teach a student to have a sense of humour about serious things in life, they are teaching them how to cope in the real world".

Conclusion

Medical Faculty is enthusiastic and willing to use "humour" as an educational tool in classroom / small group discussions. However, they are uncomfortable using it in bedside /clinical situations and feel that patient care scenarios need a "different" sense of humour lest it should become a negative approach and bomb. After a month long deliberation /discussion, it was felt that Visual and video triggers are less negative and useful in bedside situation; Verbal and audio triggers create more situations in classroom. These cues are Interchangeable and facilitate documentation of use of "humour" in medical teaching / learning; Eportals and simulations may provide more useful platforms for use of Humour in Medical Education. The month long discussion generated and consolidated the motivation to use humour in classrooms among the faculty who participated in it.

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Table1: Preliminary Survey results amongst medical faculty on “Humour in Medical Education”

H in ME	N=32 ; platform – ML Web	Agree Percent (n)	Disagree Percent (n)	Summary remarks
Perspective	Easy, effective, economical tool	100 (32)	0	Primarily enthusiastic and willing to use in classroom/small group of students
	Useful for negative concepts	34.4 (11)	65.6 (21)	
	Situational and spontaneous (is appropriate)	90.6 (29)	9.4 (3)	
Comfort zone	Classroom environs disrupted	21.9 (7)	78.2 (25)	Uncomfortable with patient situations
	Humor capitalizes insecurity of/on students/situations/patients	37.5 (12)	62.5 (20)	
Applicability in teaching-learning situation	May be a research topic	84.4 (27)	15.6 (5)	Medical learning situations need a “different” sense of humour
	Innovative method	96.9 (31)	3.1 (1)	
	Learnable skill	71.9 (23)	28.1 (9)	
Zones of comfort for the medical faculty in using Humour	Involves patient/ clinical procedure/practicals(lab work) - 8 first preferences + 6 second preferences			
	Involves classroom/lecture/discussion with students – 24 first preferences (18 only preferences)+ 7 second preference			
Response of faculty to a humorous situation in class	5 conservative; 19 appreciative; 15 exuberant in response to a situation			

Table 2: Outcome /Format of month long discussion on Humour in Medical Education (H in ME)

	Week 1	Week2	Week3	Week4
Topic of discussion	Perspective; Comfort zone	Concept of humour and types; Literature and documentation	Favourable (what went right) and unfavourable situations (what went wrong) from experience	Future applicability and utility
	A joke a day contest amongst participants (63 mails) – 110 jokes/ cartoons/ video/snippets / links			
Content exchange	27 emails; 2pdf; 1 word doc; 1 weblink; 6 you tube links	32 emails; 4 pdf;1 word doc; 2 reviews;1 wikilink (iae-pedia) ; 1 picture; 2 ppt presentations	11 emails;1 web link	6 emails; 1 video and 1 ppt presentation
Summary / outcome	Aware and enthusiastic; Use in classroom/small group; No negative humour; Situational (classroom in medical school) humour is a stumbling block if not spontaneous.	Monotony breaker; positive attitude and attendance in class; minimal research and difficult documentation as humour HAS to be(?) spontaneous. No negative humour	Bedside (situation) teaching is tense and gloomy. Risk of negative humour is disproportionately high.	Visual and video triggers are less negative and useful in bedside situation; Verbal and audio triggers create more situations in classroom. These triggers are interchangeable and easily documented ; Eportals are more useful